

CLAIMS

What is claimed is:

1. An electrophoretic apparatus comprising a first electrode, a second electrode and a plurality of closed spaces divided by partitions,

wherein the closed space contains an electrophoretic suspension in which electrophoretic particles are dispersed in a dispersion medium, and the electrophoretic particles migrate by application of a voltage via the first electrode and the second electrode,

wherein a component is disposed between the closed space and at least one of the first electrode and the second electrode, and

wherein the component comprises a mixture including at least two different materials of a first material and a second material.

2. The electrophoretic apparatus according to Claim 1,

wherein the affinity of the first material for the electrophoretic particles is higher than the affinity of the second material for the electrophoretic particles.

3. The electrophoretic apparatus according to Claim 1,
wherein the first material and the second material have different holding powers for holding the uneven distribution state of the electrophoretic particles without applying any voltage, the uneven distribution state being caused by the application of a voltage, and
wherein the holding power of the first material is higher than that of the second material.
4. The electrophoretic apparatus according to Claim 1,
wherein the polarity of the first material is higher than the polarity of the second material.
5. The electrophoretic apparatus according to Claim 1,
wherein the electrophoretic particles are titanium dioxide (TiO_2) particles,
wherein the first material is an acrylic resin, and
wherein the second material is a silicone resin.
6. The electrophoretic apparatus according to Claim 1,
wherein the electrophoretic particles comprise positively charged particles and negatively charged particles which have colors different from each other.

7. The electrophoretic apparatus according to Claim 1,
wherein the electrophoretic particles comprise titanium
dioxide (TiO_2) particles and colored particles made of an
acrylic resin,

wherein the first material is an acrylic resin, and
wherein the second material is a silicone resin.

8. An electrophoretic apparatus comprising a first
electrode, a second electrode and a plurality of
microcapsules,

wherein the microcapsule contains an electrophoretic
suspension in which electrophoretic particles are dispersed
in a dispersion medium, and the electrophoretic particles
migrate by application of a voltage via the first electrode
and the second electrode,

wherein a component is disposed between the
microcapsules and at least one of the first electrode and
the second electrode, and

wherein the component comprises a mixture including at
least two different materials of a first material and a
second material.

9. The electrophoretic apparatus according to Claim 8,
wherein the affinity of the first material for the
electrophoretic particles is higher than the affinity of the
second material for the electrophoretic particles.

10. The electrophoretic apparatus according to Claim 8,
wherein the first material and the second material have
different holding powers for holding the uneven distribution
state of the electrophoretic particles without applying any
voltage, the uneven distribution state being caused by the
application of a voltage, and

wherein the holding power of the first material is
higher than that of the second material.

11. The electrophoretic apparatus according to Claim 8,
wherein the polarity of the first material is higher
than the polarity of the second material.

12. The electrophoretic apparatus according to Claim 8,
wherein the electrophoretic particles are titanium
dioxide (TiO₂) particles,

wherein the first material is an acrylic resin, and
wherein the second material is a silicone resin.

13. The electrophoretic apparatus according to Claim 8,
wherein the electrophoretic particles comprise
positively charged particles and negatively charged
particles which have colors different from each other.

14. The electrophoretic apparatus according to Claim 8,
wherein the electrophoretic particles comprise titanium
dioxide (TiO₂) particles and colored particles made of an
acrylic resin,
wherein the first material is an acrylic resin, and
wherein the second material is a silicone resin.

15. An electrophoretic apparatus comprising a first
electrode, a second electrode and a plurality of closed
spaces divided by partitions,
wherein the closed space contains an electrophoretic
suspension in which electrophoretic particles are dispersed
in a dispersion medium, and the electrophoretic particles
migrate by application of a voltage via the first electrode
and the second electrode,

wherein a component is disposed between the closed
space and at least one of the first electrode and the second
electrode, and

wherein the component comprises at least a first

component made of a first material and a second component made of a second material different from the first material.

16. The electrophoretic apparatus according to Claim 15, wherein the affinity of the first material for the electrophoretic particles is higher than the affinity of the second material for the electrophoretic particles.

17. The electrophoretic apparatus according to Claim 15, wherein the first material and the second material have different holding powers for holding the uneven distribution state of the electrophoretic particles without applying any voltage, the uneven distribution state being caused by the application of a voltage, and

wherein the holding power of the first material is higher than that of the second material.

18. The electrophoretic apparatus according to Claim 15, wherein the polarity of the first material is higher than the polarity of the second material.

19. The electrophoretic apparatus according to Claim 15,
wherein the first component is disposed closer to at
least one of the first electrode and the second electrode
than is the second component.
20. The electrophoretic apparatus according to Claim 15,
wherein the first component is disposed in contact with
at least one of the first electrode and the second
electrode.
21. The electrophoretic apparatus according to Claim 15,
wherein the electrophoretic particles are titanium
dioxide (TiO₂) particles,
wherein the first material is an acrylic resin, and
wherein the second material is a silicone resin.
22. The electrophoretic apparatus according to Claim 15,
wherein the electrophoretic particles comprise
positively charged particles and negatively charged
particles which have colors different from each other.

23. The electrophoretic apparatus according to Claim 15,
wherein the electrophoretic particles comprise titanium
dioxide (TiO₂) particles and colored particles made of an
acrylic resin,

wherein the first material is an acrylic resin, and
wherein the second material is a silicone resin.

24. An electrophoretic apparatus comprising a first
electrode, a second electrode and a plurality of
microcapsules,

wherein the microcapsule contains an electrophoretic
suspension in which electrophoretic particles are dispersed
in a dispersion medium, and the electrophoretic particles
migrate by application of a voltage via the first electrode
and the second electrode,

wherein a component is disposed between the
microcapsules and at least one of the first electrode and
the second electrode, and

wherein the component comprises at least a first
component made of a first material and a second component
made of a second material different from the first material.

25. The electrophoretic apparatus according to Claim 24,
wherein the affinity of the first material for the
electrophoretic particles is higher than the affinity of the
second material for the electrophoretic particles.

26. The electrophoretic apparatus according to Claim 24,
wherein the first material and the second material have
different holding powers for holding the uneven distribution
state of the electrophoretic particles without applying any
voltage, the uneven distribution state being caused by the
application of a voltage, and

wherein the holding power of the first material is
higher than that of the second material.

27. The electrophoretic apparatus according to Claim 24,
wherein the polarity of the first material is higher
than the polarity of the second material.

28. The electrophoretic apparatus according to Claim 24,
wherein the first component is disposed closer to at
least one of the first electrode and the second electrode
than is the second component.

29. The electrophoretic apparatus according to Claim 24,
wherein the first component is disposed in contact with
at least one of the first electrode and the second
electrode.

30. The electrophoretic apparatus according to Claim 24,
wherein the electrophoretic particles are titanium
dioxide (TiO_2) particles,
wherein the first material is an acrylic resin, and
wherein the second material is a silicone resin.

31. The electrophoretic apparatus according to Claim 24,
wherein the electrophoretic particles comprise
positively charged particles and negatively charged
particles which have colors different from each other.

32. The electrophoretic apparatus according to Claim 24,
wherein the electrophoretic particles comprise titanium
dioxide (TiO_2) particles and colored particles made of an
acrylic resin,
wherein the first material is an acrylic resin, and
wherein the second material is a silicone resin.

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33. Electronic equipment comprising the electrophoretic apparatus according to any one of Claims 1 to 32.